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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,398	02/21/2002	Zheng Haihong	50072.8US01	1573
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DARBY & DARBY P.C. P.O. BOX 5257 NEW YORK, NY 10150-6257			EXAMINER HAN, CLEMENCE S	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 05/04/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/081,398

Applicant(s)

HAIHONG, ZHENG

Examiner

Clemence Han

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13-17 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-17 and 19-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 11 is objected to because of the following informalities: there is a typographical error in line 22. "anon-enhanced" should be replaced with "a non-enhanced". Appropriate correction is required.
2. Claim 15 is objected to because of the following informalities: there is a typographical error in line 2. "over apt a" should be replaced with "over a". Appropriate correction is required.
3. Claim 15 is objected to because of the following informalities: there is a typographical error in line 8. there is a hanging period after "data". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 1-11, 13-17 and 19-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Regarding claim 1, the limitation "employing the second type of message ..." in line 13-17 renders the claim indefinite because it is unclear whether the existing LSP are kept or not in either EMPLS portion and MPLS portion.

7. Regarding claim 11, the phrase "determining whether the method operates within" in line 21 renders the claim indefinite because it is unclear how a step in a method can have limitations on the method itself. It is recursive and unclear.

8. Regarding claim 15, the phrase "a kind of data" in line 7 and "the kind of data" in line 8 render the claim indefinite because it is unclear exactly what it means. The specification discloses about FEC in page 3, 6, 9, 15 and 18. Examiner could not find any disclosure regarding FEC based on a kind of data included with each packet and identifying the kind of data included in the received packet.

9. Regarding claim 25, the limitation "using the second type of message ..." in line 16-21 renders the claim indefinite because it is unclear whether the existing LSP are kept or not in either EMPLS portion and MPLS portion.

***Claim Rejections - 35 USC § 103***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claim 15-17, 20-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goguen et al. (US 6,665,273) in view of Reeves et al. (US Pub. 2002/0080794).

Regarding to claim 15, Goguen teaches a router for forwarding packets to a final destination over an Multi-Protocol Label Switching (MPLS) network, comprising: a transceiver for receiving and transmitting each packet of one or more flows of packets from a source to a destination (R's in Figure 2); a labeler 122 for labeling each packet

with a label; a pathmaker 120 for assisting in establishing a label switched path along which each packet is forwarded between an ingress router and an egress router of the enhanced Multi-Protocol Label Switching (MPLS) network, wherein the label switched path corresponds to the label of each packet; a reserver for assisting in reserving resources along the label switched path (Column 2 Line 41 – Column 3 Line 5), wherein the reserver further assists in dynamically modifying resources reserved along the label switched path while avoiding establishing a new label switched path (Column 8 Line 3-6); and a scheduler that forwards each received packet along the label switched path towards the egress router, wherein the egress router removes the label and forwards each packet (Column 3 Line 18-20). Goguen, however, does not teach explicitly a label according to a forwarding equivalence class (FEC) that corresponds to the label, wherein the forwarding equivalence class (FEC) is based on a kind of data included with each packet and wherein the labeler examines the label of the received packet to identify the kind of data included in the received packet. Reeves teaches a label according to a forwarding equivalence class (FEC) that corresponds to the label, wherein the forwarding equivalence class (FEC) is based on a kind of data included with each packet and wherein the labeler examines the label of the received packet to identify the kind of data included in the received packet [0038]. It would have been obvious to one skilled in the art to modify Goguen to label according to a FEC as taught by Reeves in order to comply with MPLS standard [0057].

Regarding to claim 16, Goguen teaches the pathmaker 120 and reserver (label allocation module in Column 2 Line 3) operate independently from one another while maintaining a common association according to the label.

Regarding to claim 17, Reeves teaches a label information base 110 that stores a list of labels and a mapping of a relationship between each label 112g and forwarding equivalence class (FEC) 112.

Regarding to claim 20, Goguen teaches the reserver assists in using RSVP (Resource Reservation Protocol) to reserve resources along the label switched path for packets of the same flow (Column 2 Line 41 – Column 3 Line 5).

Regarding to claim 21, Goguen teaches the reserver assists in transmitting a message to reserve the resources along the label switched path, wherein the message includes the label (Column 2 Line 41 – Column 3 Line 5).

Regarding to claim 22, Goguen teaches the label is a first label and the reserver assists in transmitting a message for reserving resource that includes a second label such that the message follows the label switched path but is discerned from packets containing the first label (Column 8 Line 41-47).

Regarding to claim 24, Goguen teaches the transceiver, labeler, pathmaker, reserver, and scheduler are enabled to operate as an ingress enhanced label switching router, an intermediate enhanced label switching router, and an egress enhanced label switching router (R's in Figure 2).

***Allowable Subject Matter***

12. Claim 1, 11 and 25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

13. Claim 2-10, 13, 14, 19 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

14. Applicant's arguments with respect to claim 1-11, 13-17 and 19-25 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. H.

Clemence Han  
Examiner  
Art Unit 2616

A handwritten signature in black ink, appearing to read 'Huy D. Vu', with a long horizontal line extending to the right.

HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600